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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,238	01/03/2006	Masayuki Uda	053550	8680
38834	7590	08/11/2006	EXAMINER	
WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP 1250 CONNECTICUT AVENUE, NW SUITE 700 WASHINGTON, DC 20036			MIDKIFF, ANASTASIA	
			ART UNIT	PAPER NUMBER
			2882	

DATE MAILED: 08/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/563,238

Applicant(s)

UDA, MASAYUKI

Examiner

Anastasia Midkiff

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 03 January 2006.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

Receipt is acknowledged of papers filed under 35 U.S.C. 119 (a)-(d) based on an application filed as PCT/JP04/09535 on 07/05/2004. Applicant has not complied with the requirements of 37 CFR 1.63(c), since the oath, declaration or application data sheet does not acknowledge the filing of any foreign application. A new oath, declaration or application data sheet is required in the body of which the present application should be identified by application number and filing date.

Specification

The abstract of the disclosure is objected to because the abstract should not include references to figures (see the term "Fig.") in Line 3 and in Line 4). Correction is required. See MPEP § 608.01(b).

A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

Some specific examples include:

- Replace "one-dot-chain" with --dotted line-- in Line 10 of Page 7.
- Replace "canceled out each other" with --cancelled out-- or other grammatically appropriate phrase, in Line 9 of Page 8.
- The phrase "two types of position at different angles first" in Lines 21-22 of Page 8 are nonsensical and must be replaced with a grammatically correct and meaningful, clear phrase.

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- Remove paragraph 21 from Pages 9-10 and re-insert the paragraph and its heading between paragraphs 9 and 10.

Appropriate correction is required.

Claim Objections

The claims are objected to because the lines are crowded too closely together, making reading difficult. Substitute claims with lines one and one-half or double spaced, discernible spaces between words, and on good quality paper are required. See 37 CFR 1.52(b).

Additionally, the claim is generally narrative and indefinite, failing to conform with current U.S. practice. It appears to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to Claim 1, Lines 2-4 recite that the device moves "a white x-ray generating means and an x-ray detecting means to a first position and a second position which are separate from each other," wherein the phrase "which are separate

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from each other” renders the claim indefinite, as it is unclear if this refers to a separation between the source and detector or a separation between the first position and second position separation.

Further with respect to Claim 1, Lines 4-5 recite, “uses intensities of x-rays detected for each level of energy by said x-ray detecting means,” rendering the claim indefinite, as it is unclear what device is using said intensities.

Furthermore, with respect to Claim 1, in Lines 7-9, the claim recites “the difference” wherein there is insufficient antecedent basis for this limitation in the claim. Examiner suggests replacing “the” with --a--.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1, as it is best understood, is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent to Ciccarelli et al. (USP# 4,263,510).

With respect to Claim 1, Ciccarelli et al. teach an energy dispersion type x-ray diffraction device (Column 4, Lines 12-35) comprising:

- a white x-ray generating means (22) and an x-ray detecting means (26) which are moved from a first position to a second position with respect to

a sample (Column 4, Lines 36-50), which are separate from each other (Figure 1);

- wherein said device is configured to use intensities of x-rays detected for all levels of energy detected by said x-ray detecting means at the respective positions as first and second data (Column 6, Lines 44-61);
- wherein said device is configured to obtain third data regarding diffracted x-rays from a difference between said first data and second data (Column 6, Lines 44-61); and
- wherein said device is configured to obtain data regarding fluorescent x-rays detected from a difference between the first or second data and third data (Column 6, Lines 44-61).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

U.S. Patent to Blake et al. (USP# 5,491,738) teaches an energy dispersion type x-ray diffraction device comprising: a white x-ray generating means and an x-ray detecting means which are separate from each other; wherein said device is configured to use intensities of x-rays detected for all levels of energy detected by said x-ray detecting means as first and second data; wherein said device is configured to obtain third data regarding diffracted x-rays from a difference between said first data and second data; and wherein said device is configured to obtain data regarding fluorescent

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x-rays detected from a difference between the first or second data and third data, but without movement of the source and detector to a first and a second position.


U.S. Patent to Yellipreddi et al. (USP# 5,406,608) for an energy dispersive combined XRD/XRF apparatus with a single source, but with two detectors.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anastasia Midkiff whose telephone number is 571-272-5053. The examiner can normally be reached on M-F 7-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Glick can be reached on 571-272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ASM
8/2/06



EDWARD J. GLICK
SUPERVISORY PATENT EXAMINER